

Notice of Allowability

Application No.

09/802,234

Examiner

Kevin Quinto

Applicant(s)

PRALL, KIRK

Art Unit

2826

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 7 August 2003
2. ☒ The allowed claim(s) is/are 1-12, 15, 16, 20-36 and 69-92
3. ☒ The drawings filed on 08 March 2001 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- * Certified copies not received: _____
5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
(a) ☐ The translation of the foreign language provisional application has been received.
6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE**

7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☐ CORRECTED DRAWINGS must be submitted.
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
1) ☐ hereto or 2) ☐ to Paper No. _____.
(b) ☐ including changes required by the proposed drawing correction filed _____, which has been approved by the Examiner.
(c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. _____

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet.

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- 1~~x~~ Notice of References Cited (PTO-892)
- 3~~x~~ Notice of Draftsperson's Patent Drawing Review (PTO-948) 4/14/03
- 5~~x~~ Information Disclosure Statements (PTO-1449), Paper No. 1/14/03
- 7~~x~~ Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 2~~x~~ Notice of Informal Patent Application (PTO-152)
- 4~~x~~ Interview Summary (PTO-413), Paper No. _____
- 6~~x~~ Examiner's Amendment/Comment
- 8~~x~~ Examiner's Statement of Reasons for Allowance
- 9~~x~~ Other

DETAILED ACTION

Allowable Subject Matter

1. Claims 1-12, 15, 16, 20-36, and 69-92 are allowed.
2. The following is an examiner's statement of reasons for allowance: the examiner is unaware of any prior art which suggests a non-volatile vertical split gate memory transistor where the select gate is formed in the trench, the floating gate is over the drain and the cell has a feature size less than $4F^2$.
3. Ahn (USPN 5,877,525) discloses a non-volatile semiconductor memory cell. However this particular EEPROM cell is does not have the vertical structure specified by the applicant and therefore does not teach the applicant's invention.
4. Chang et al. (USPN 5,969,383) discloses another non-volatile semiconductor memory cell. The device of Chang does not teach the vertical select gate as specified by the applicant. Thus Chang does not teach the applicant's invention.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Quinto whose telephone number is (703) 306-5688. The examiner can normally be reached on M-F 8AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on (703) 308-6601. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

KVQ